PART VI LAKE OKEECHOBEE AND ESTUARY WATERSHEDS BASIN

Amend Rule 40E-4.0415, F.A.C. as follows:

(3) Notwithstanding the provisions of subsections (1) and (2):
(a) The Governing Board has, in Rules 40E-41.023, 40E-41.123, 40E-41.223, ~~and~~ 40E-41.323, and 40E-41.523, F.A.C., designated specific geographic areas in which additional surface water management criteria are necessary in order to ensure that construction, alteration, operation, maintenance, removal or abandonment of surface water management systems is not harmful to the water resources.

Amend Rule 40E-41, F.A.C. as follows:

40E-41.521 – Definitions

When used in this Part:

(1) "Agricultural Use" means the primary land use for the proposed project is for the sole purpose of normal farming operations; or the customary and generally accepted activities, practices, and procedures that farmers adopt, use, or engage in during the production and preparation for market of poultry, livestock, and associated farm products; and in the production, harvesting, or packaging of agricultural crops which include agronomic, horticultural, and silvicultural crops. Included are the management, collection, storage, composting, transportation, and utilization of organic agricultural waste, manure, and materials derived solely from agricultural crops.

(2) "Airport Use" means the primary land use for the proposed project is aircraft departure, arrival and storage subject to regulation by the Federal Aviation Administration and is not part of a plan of development for other uses.

(3) "Best Management Practices (BMPs)" are defined in Section 373.(2)(a), F.S.

(4) "Post Construction Pollution Prevention Plan" means a document that provides details of controls and practices to be implemented after construction is completed to reduce or eliminate the generation and accumulation of potential stormwater runoff contaminants at or near their source. The Post Construction Pollution Prevention Plan shall include plans for surface water management system operation and maintenance, nutrient and pesticide management, solid waste management, and/or animal/livestock waste storage and disposal if applicable. The Plan shall require maintenance, operation and annual inspection of the surface water management system.

(5) "Primary Detention/Retention Treatment System or Component" means that portion or component of the surface water management system providing the volumetric requirements of Section 5.2.1(a) of the Basis of Review For Environmental Resource Permit Applications Within The South Florida Water Management District.

(6) "Public Roadway Use" means the primary land use for the proposed project is a public transportation thoroughfare that is not part of a plan of development for other uses.

Specific Authority: 373.044, 373.113, F.S.
Law Implemented: 373.413, 373.416, F.S.
New _____

40E-41.523 – Lake Okeechobee and Estuary Watersheds Basin
The Lake Okeechobee and Estuary Watersheds Basin is shown in Figure VI-1.
Specific Authority: 373.044, 373.113, F.S.
Law Implemented: 373.413, 373.416, F.S.
New _____

40E-41.533 – Implementation
(1) The rules contained in this part apply to projects within the Lake Okeechobee and Estuary Watersheds Basin which do not have complete applications, as evidenced by a letter of completeness under Rule 40E-1.603(1)(a) F.A.C., on the effective date of the rule. An application which is submitted and complete prior to the effective date of this rule shall be reviewed under the rules in existence prior to the effective date of this rule unless the applicant elects to have such activities reviewed under this rule.
(2) Activities approved in a conceptual, general, or individual permit which were permitted prior to the effective date of this rule, or exempt from regulation, shall be exempt from this rule. This exemption shall be for the plans, terms, and conditions approved in the permit and shall be valid for the term of such permit. This exemption shall also apply to any modification of the plans, terms and conditions of the permit, including new activities which are consistent with a conceptual approval. However, this exemption shall not apply to a modification that would extend the permitted time limit for construction beyond two additional years or to any modification which is reasonably expected to lead to substantially different water resource impacts, unless that modification would lessen the impact to water resources.
(3) Applications for retrofit projects are exempt from this rule. Retrofit projects include construction of facilities that provide benefits to existing developed areas or natural areas where no new development is proposed as part of the application or a larger plan of development.
Specific Authority: 373.044, 373.113, F.S.
Law Implemented: 373.413, 373.416, F.S.
New _____

40E-41.543 - Application of Part VI
Projects located within the Lake Okeechobee and Estuary Watersheds Basin which require permits pursuant to Rule 40E-4.041, F.A.C., and which are not exempt pursuant to Section 373.406, F.S., shall be constructed, altered, operated, maintained and abandoned in accordance with the criteria specified in Rules 40E-4.301, 40E-4.302, and 40E-40.302, F.A.C., as applicable, and Rule 40E-41.563, F.A.C.
Specific Authority: 373.044, 373.113, F.S.
Law Implemented: 373.413, 373.416, F.S.
New _____

40E-41.563 - Conditions for Issuance of Environmental Resource Permits in the Lake Okeechobee and Estuary Watersheds Basin

(1) A Post Construction Pollution Prevention Plan shall be submitted as part of the permit application. If a property owners' association or other entity will be formed that is responsible for operating and maintaining the surface water management system, the Post Construction Pollution Prevention Plan shall be incorporated into the entities' Articles of Incorporation, Declaration of Protective Covenants or Deed Restrictions.

(2) Records of maintenance, operation and inspection required pursuant to the Post Construction Pollution Prevention Plan shall be maintained by the permittee and shall be made available for inspection and copying by the District staff upon request to determine compliance with the Post Construction Pollution Prevention Plan and District rules.

(3) If the application is for a non-agricultural use but the activities proposed will produce livestock or equestrian waste, the Post Construction Pollution Prevention Plan shall provide for the management, storage and disposal of such wastes primarily through the use of waste containment which retains solids and liquids and transports excess waste off-site.

(4) An additional fifty (50) percent retention/detention water quality treatment shall be required over that criteria required in Section 5.2.1(a) of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District.

(5) Wet detention areas shall provide an average hydraulic residence time of at least twenty one (21) days during the wet season (June – October). The detention area depth shall meet the requirements of Rule 7.4(c) of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District.

(6) The criteria in this subsection shall apply to all projects within the Lake Okeechobee and Estuary Watersheds Basin that are forty (40) acres or more in size or propose impacts to five (5) acres or more of wetlands; except that the criteria in this subsection shall not apply to projects that propose an agricultural, public roadway or airport use.

(a) Dry detention water quality treatment systems shall not be used as the primary detention/retention component of the water management system. Dry detention water quality treatment components shall only be incorporated as pretreatment components upstream of the primary detention/retention components of a surface water management system.

(b) Pursuant to Section 373.418, F.S., Section 373.4595, F.S. and Rule 62-40.432, F.A.C., incorporated by reference in Rule 40E-4.091, F.A.C., the site and the surface water management system design shall achieve at least eighty percent (80%) reduction of average annual total phosphorus that would cause or contribute to violations of state water quality standards. Attachment VI-1 includes BMPs with methods for determining removal efficiencies to demonstrate compliance with this requirement. The District will consider alternative BMPs which are not listed in Attachment VI-1, provided that the application includes: descriptions and construction plans for the proposed BMPs; information demonstrating the removal efficiency of the

proposed BMPs; operation and maintenance plans for the proposed BMPs; and meet the conditions for issuance set forth in Rule 40E-4.301 and 40E-4.302, F.A.C.

(c) The applicant shall demonstrate that the average annual post development discharge volume shall not exceed an estimated average annual pre development discharge volume, where the pre development condition is an unimproved condition.

(7) Agricultural use projects that require an Environmental Resource Permit pursuant to 40E-4 and 40E-40, F.A.C. shall:

(a) Submit a phosphorus management plan in accordance with Chapter 40E-61, F.A.C. if the project is within the 40E-61 boundary or; if the project is not within the 40E-61 boundary, submit a phosphorus management plan and a water quality monitoring and analysis plan in accordance with Chapter 62-160, F.A.C. Projects which have submitted a notice of intent to implement a BMP program to the Florida Department of Agriculture and Consumer Services are not required to submit a phosphorus management plan or a water quality monitoring and analysis plan to the District under the requirements of this subsection.

(b) Provide an additional fifty (50) percent retention/detention water quality treatment over that criteria required in Section 5.2.1(a) of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District.

(c) Demonstrate that the average annual post development discharge volume shall not exceed an estimated average annual pre development discharge volume, where the pre development condition is an unimproved condition.

Specific Authority: 373.044, 373.113, F.S.

Law Implemented: 373.413, 373.416, F.S.

New_____

ATTACHMENT VI-1 (to be revised)
Best Management Practices (BMPs)

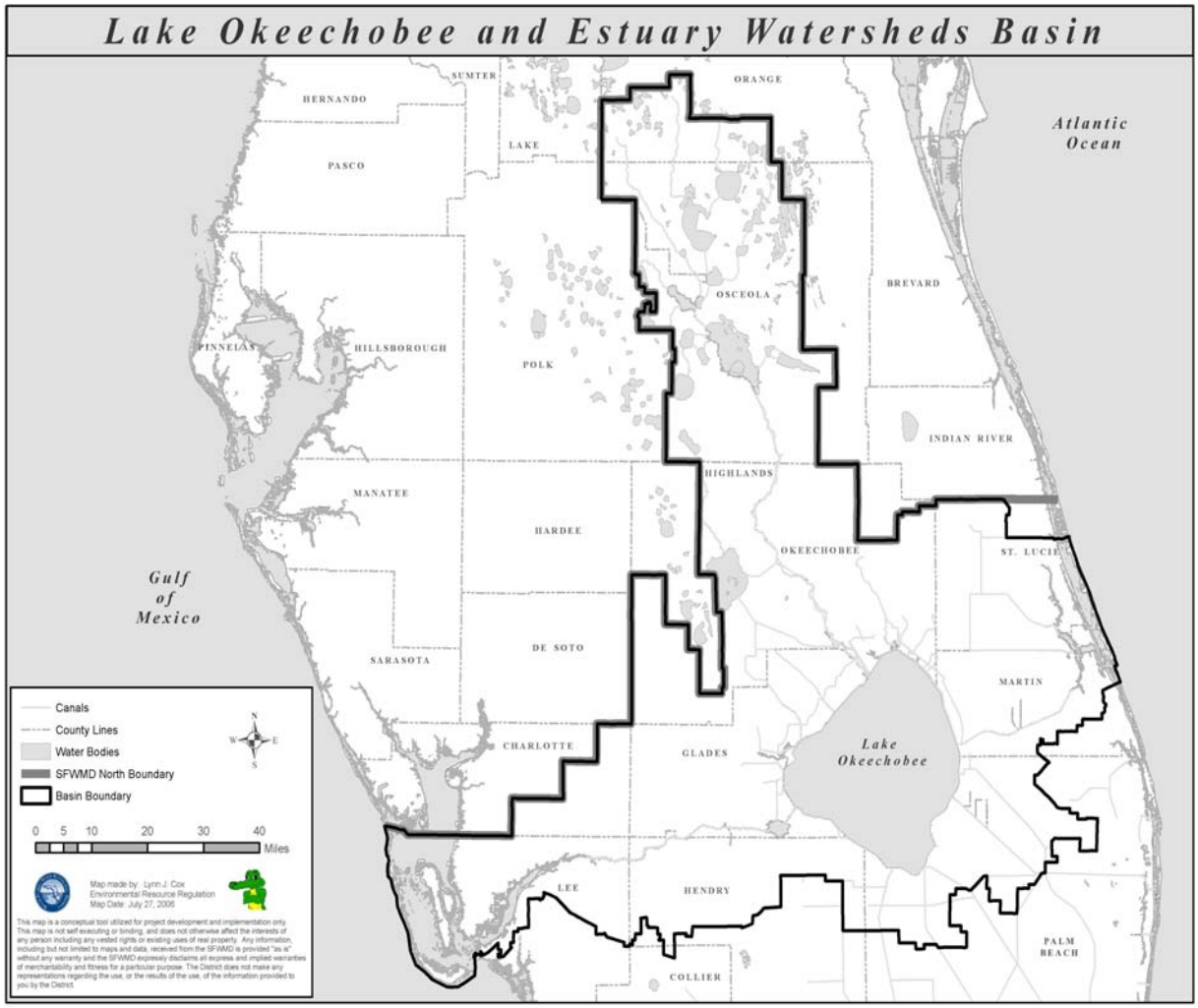
BMP	Description
Group A – Site Design Source Controls and BMPs	
1. Reduced Turf Coverage	Reduced turf coverage of the developed portion of the project (excluding wet detention areas or wetland and upland conservation areas established in a conservation easement)
2. Native Landscape Plantings	Projects with non-turf plantings consisting of a percentage of native species that are drought tolerant. Native species are defined in Nelson, Gil. *Florida's Best Native Landscape Plants: 200 Readily Available Species for Homeowners and Professionals*, University Press of Florida, 2003
3. Stormwater Recycling	Projects which incorporate systems for storing stormwater runoff to be used for irrigation or other reuse. Reuse systems must be designed with surface water management systems that ensure no impacts to flood protection or water quality treatment. An operating entity meeting the requirements of Section 9.1, Basis of Review for Environmental Resource Permits within the South Florida Water Management District must be designated.
4. Rooftop Runoff	a. Bioretention: building and home rooftop runoff must be discharged onto shallow landscaped depressions designed to capture the first 0.5 inches of roof runoff, which are planted with native vegetation, and backfilled with soil-rock aggregate (bioretention cell). An analysis is required of the pervious area's ability to infiltrate roof runoff and accept roof runoff from the design storm event without erosive impacts. b. Vegetated Roof Cover: for engineered roofing systems that allow for the propagation of rooftop vegetation while protecting the integrity of the underlying roof. A maintenance and monitoring plan shall also be submitted. c. Cisterns: Building and home rooftops which direct runoff into cisterns for storage and reuse.

BMP	Description
6. Pervious Pavement	Projects which incorporate and maintain pervious or porous material on parking lots, driveways, or other applicable areas. Details of pervious pavement area foundation design, construction methods and a post construction maintenance plan shall be submitted with the permit application.
7. Detention/Retention Pond Side Slope Buffers	Projects which incorporate planted non-turf side slopes leading to stormwater detention/retention ponds located above normal water control elevation designed to prevent direct runoff from turf landscapes into ponds. Plans must demonstrate the area will not cause erosion impacts, will be properly maintained, and will maintain access for maintenance. Average five (5) foot wide strips planted on a minimum of two (2) foot centers with wetland and/or transitional plant species are required.
Group B – Stormwater Conveyance and Pretreatment BMPs	
1. Filter Strips / Vegetated Stormwater Inlets	Projects which contain vegetated buffers with less than five percent (5%) slope located between impervious areas and stormwater inlets. There must be a minimum of twenty (20) feet between impervious areas and inlets. The buffer area must be designed to minimize concentrating flows by spreading the flow over an area of at least five (5) feet wide.
2. Vegetated (Grassed) Swales	Projects which utilize vegetated or grassed swales to receive stormwater runoff from roadways and parking lots, as opposed to curbs, gutters, or culverts, to convey stormwater.
3. Sediment Trap Structures	Projects which incorporate the installation of baffle boxes, or equivalent proprietary designs, upstream of the primary detention/retention system. Long-term operation plans must include mandatory manual or vacuum cleanout of accumulated sediments. An operating entity meeting the requirements of Section 9.1, Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District must be designated and a maintenance schedule must be established.

BMP	Description
4. Dry Detention / Retention Pre-Treatment	Projects with dry detention/retention pre-treatment areas constructed upstream of primary detention/retention systems. A minimum additional one-half (½) inch detention/retention volume is required in addition to the detention/retention volume required in the primary detention/retention system. These areas are not subject to the twenty-five percent (25%) and fifty percent (50%) volume credits provided in Section 5.2.1 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District.
Group C – Stormwater Management System Design Enhancement BMPs	
1. Extended Hydraulic Residence Time	Surface water management systems which provide for an extended average Hydraulic Residence Time greater than 21 days during the wet season (June – October). The maximum detention area depth allowed in calculations to demonstrate compliance with the average hydraulic residence time is twelve (12) feet from the control elevation. The actual depth may be greater than twelve (12) feet to a maximum of twenty (20) feet if it can be demonstrated that the additional depth will not cause water quality degradation of the water discharging from the wet detention area.
2. Wetlands	Projects which utilize on-site created wetlands in a treatment train. Created wetland mitigation areas are acceptable if primary treatment is provided prior to discharge into the mitigation area. Discharges into wetlands must not adversely impact the wetlands. Potential impacts include, but are not limited to, alteration of hydroperiod, erosion, recruitment of exotic species, or other water quality impacts.
3. Littoral Berms / Settling Basins / Phyto-Zones within Detention Areas	Projects with constructed basins within detention areas (lakes) below the control elevation that provide an area for discharges into the lake to disperse, allowing pollutants to settle out of the water column prior to overflowing an earthen or rock berm, into the remainder of the detention area. The earthen or rock berm must be located at or below the control elevation.

BMP	Description
4. Planted Filter Marsh	Projects designed with a planted wetland marsh just upstream of the project outfall structure. These areas shall be designed as shallow areas with a minimum size of ten percent (10%) of the total lake area measured at the control elevation constructed within the lake and planted with wetland vegetation such that all stormwater must flow through the marsh area prior to discharging through the project outfall structure. A sump area between the marsh area and outfall structure is also required. Detailed plans of the marsh area are required that include marsh area location, dimensions, elevations, species to be planted and a maintenance plan.
5. Increased Flow Path	Projects which incorporate internal levees and/or berms within the stormwater detention ponds or locate inflow and outflow structures to maximize effective treatment time by increasing the flow path distance. The minimum flow path distance between inflows and outflows for each pond must be twice the average width of the pond.
6. Chemical Treatment	Addition of chemicals, such as Alum, to the stormwater management system. Detailed plans are required on chemical injection methods, rates, mixing of chemicals and stormwater, calculations for sizing settling basin, and location of each component. Operation and maintenance plans and monitoring of the system effectiveness is also required. The operating entity shall be a government entity with resources to operate and maintain the system.

FIGURE VI-1


Lake Okeechobee and Estuary Watersheds Basin
SUMTER
ORANGE
HERNANDO
LAKE
Atlantic Ocean
PASCO
OSCEOLA
BREVARD
PINELLAS
HILLSBOROUGH
POLK
INDIAN RIVER
HIGHLANDS
MANATEE
HARDEE
OKEECHOBEE
ST. LUCIE
Gulf of Mexico
DE SOTO
SARASOTA
MARTIN
CHARLOTTE
GLADES
Lake Okeechobee
LEE
HENDRY
PALM BEACH
COLLIER
Canals
County Lines
Water Bodies
SFWMD North Boundary
Basin Boundary
0 5 10 20 30 40
Miles
Map made by: Lynn J. Cox
Environmental Resource Regulation
Map Date: July 27, 2006
This map is a conceptual tool utilized for project development and implementation only. This map is not self-executing or binding, and does not otherwise affect the interests of any person including any vested rights or existing uses of real property. Any information, including but not limited to maps and data, received from the SFWMD is provided "as is" without any warranty and the SFWMD expressly disclaims all express and implied warranties of merchantability and fitness for a particular purpose. The District does not make any representations regarding the use, or the results of the use, of the information provided to you by the District.